

[0016] It is clear on the whole that those skilled in the art are free to choose the light sources and modules, provided that the first light module of the first headlamp has a higher resolution than the first light module of the second headlamp.

[0017] It is entirely possible that the first headlamp and/or the second headlamp comprise(s) more than two light modules.

[0018] It is also provided that the light module or the first light distribution of the first projector device performs a function which is different than the function of the light module or the second light distribution of the second projector device. The lighting device may be more flexibly designed thereby. The two light modules may preferably be operated entirely independently of each other, the light modules, in particular, generally not being operated simultaneously.

[0019] The projector devices may be designed as headlamps, the two headlamps being, in particular, a headlamp installed in the right front of the vehicle and a headlamp installed in the left front of the vehicle. Alternatively, the projector devices or the light modules of the projection devices may also be arranged in other areas of the motor vehicle, in particular of the vehicle front, and the beam path between the light module and the area in front of the vehicle should preferably not be shaded at the selected position.

[0020] It may be provided that, in the non-operating state of the projector devices, the outer appearances of the projector devices correspond to each other or are symmetrical with respect to a symmetry plane situated therebetween, and/or that, in the operating state of the projector devices, the outer appearances of the projector devices correspond to each other or are symmetrical with respect to a symmetry plane situated therebetween. Due to the appearances of the projector devices, which do not differ from each other in the non-operating state, a user is given the impression that the projector devices, in particular the headlamps, are of the same design. It is possible that, during vehicle operation, a slight illumination of the projector devices is effectuated by the light modules, so that they also do not differ from each other in the operating state.

[0021] It may be provided that the illumination range of the first light distribution is different than the illumination range of the second light distribution. Functions of the two modules, which differ significantly from each other, may be implemented thereby.

[0022] For example, it is possible that the light module or the first light distribution of the first projector device performs a driver assistance function and/or that the light module or the second light distribution of the second projector device performs the function of a near-field projection. The light module or the first light distribution performing the driver assistance function may, in particular, form the headlamp light distribution during vehicle operation, which may take place, for example, by symbols or hot spots or the like. The light module or the second light distribution performing the near-field projection may project, in particular, vehicle- or user-specific information into the area directly in front of the vehicle, preferably welcome scenarios or announcements of next maneuvers during automated operation, for example a maneuver of leaving a parking space. The illumination range of the second light distribution is therefore not necessarily in the field of vision of the driver or the occupants of the motor vehicle.

[0023] It is possible that the light module of the first projector device and/or the light module of the second projector device comprise(s) an imaging element, for example a solid-state LED array or an LED matrix or a digital micromirror device or an LCoS or an LC display. Finally, each of these elements may be used in the light modules.

[0024] It may be advantageous if the first and second projector devices are largely based on equivalent parts to reduce the manufacturing complexity. The projector devices may comprise, in particular, equivalent parts in the area of optics, electronics, thermal management and mechanics.

[0025] Further scope of applicability of the present invention will become apparent from the detailed description given hereinafter. However, it should be understood that the detailed description and specific examples, while indicating preferred embodiments of the invention, are given by way of illustration only, since various changes, combinations, and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

[0026] The present invention will become more fully understood from the detailed description given hereinbelow and the accompanying drawings which are given by way of illustration only, and thus, are not limitative of the present invention, and wherein:

[0027] FIG. 1 shows a schematic front view of a motor vehicle, including a first specific embodiment of a lighting device according to the invention; and

[0028] FIG. 2 shows a perspective view of a front of a motor vehicle, including a specific embodiment of a lighting device according to the invention, from which the light distributions emanate with different illumination ranges.

DETAILED DESCRIPTION

[0029] A specific embodiment of a lighting device designed as a headlamp device of a motor vehicle is illustrated in FIG. 1. The headlamp device comprises a first headlamp 1 and a second headlamp 2. In the illustrated specific embodiment, first headlamp 1 is arranged on the left side of the vehicle front and second headlamp 2 is arranged on the right side thereof. However, it is entirely possible that first headlamp 1 is arranged on the right side of the vehicle front and second headlamp 2 is arranged on the left side thereof.

[0030] First headlamp 1 includes a first light module 3 and a second light module 4. Second headlamp 2 also includes a first light module 5 and a second light module 6. The two second light modules 4, 6 are of the same design in the illustrated exemplary embodiment and are designed, in particular, as so-called bi-LED modules. The bi-LED module may include, for example, two light-emitting diodes (LEDs) and a corresponding optical element. The optical element may comprise, in particular, two light conductors for the light of the two light-emitting diodes.

[0031] First light module 3 of first headlamp 1 comprises a light source, which is designed as a solid-state LED array. It is an LED chip having 10,000 or possibly even more individual light sources, which are all individually controllable. Light module 3 or the light source furthermore comprises a suitable optical system.